

CLAIMS:

1. A method of communicating signaling messages in a wireless communication network, the method comprising:

reading a signaling message, that is of a particular type;

5 reading a message identifier assigned to the particular type of signaling message;

packetizing the signaling message within one or more cell broadcast service pages, each of which includes the message identifier; and

transmitting the one or more cell broadcast service pages.

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2. The method according to claim 1 wherein reading a signaling message comprises:

reading a signaling message including a temporary mobile group identity for a multicast or broadcast service.

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3. The method according to claim 1 wherein reading a signaling message comprises:

reading a signaling message that controls discontinuous reception operation.

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4. The method according to claim 1 further comprising:

making one or more duplicate copies of the one or more cell broadcast service pages; and

transmitting the one or more duplicate copies.

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5. The method according to claim 1 further comprising:

prior to transmitting the one or more cell broadcast pages:

fragmenting each of the one more cell broadcast pages into a plurality of radio network packets; and

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multiplexing the plurality of radio network packets with additional radio network packets.

6. The method according to claim 1 further comprising:
receiving at least some of the one or more cell broadcast pages;
checking the message identifier in the at least some of the one or more cell
broadcast pages; and

5 in a case that the signaling message is completely received and the message
identifier indicates that the one or more cell broadcast pages carry the signaling
message:

forwarding the signaling message to a program module identified by the
message identifier.

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7. The method according to claim 6 further comprising:
prior to reading the message identifier assigned to the particular type of
signaling message:

15 selecting the message identifier and assigning the particular message identifier
to the particular type of signaling message;

transmitting the message identifier along with an opcode that specifies a
particular signaling message type to be processed by the program module; and
receiving the message identifier along with the opcode.

20 8. The method according to claim 6 further comprising:

making one or more duplicate copies of the one or more cell broadcast
service pages;

transmitting the one or more duplicate copies of the one or more cell
broadcast service pages;

25 receiving at least some of the duplicate copies of the one or more cell
broadcast service pages; and

prior to forwarding the signaling message, buffering at least parts of at
least some of the one or more cell broadcast service pages, and the one or
more duplicate copies of the one or more cell broadcast service pages;

assembling the signaling message from the at least parts of at least some of the one or more cell broadcast service pages and the one or more duplicate copies of the one or more cell broadcast service pages;

5 9. A method of operating a device to receive messages in a wireless communication network comprising:

receiving a plurality of cell broadcast service pages including one or more cell broadcast service pages that carry one or more signaling messages;

10 checking message identifiers of the plurality of cell broadcast service pages to ascertain which of the plurality of cell broadcast service pages carry the one or more signaling messages; and

passing the one or more signaling messages to a program module.

15 10. The method according to claim 9 wherein passing the one or more signaling messages comprises:

passing the one or more signaling messages to a program module specified by the message identifiers.

20 11. The method according to claim 9 further comprising:

receiving one or more duplicate copies of one or more of the one or more cell broadcast service pages;

buffering at least a part of each of the one or more cell broadcast service pages and duplicate copies; and

25 assembling the one or more signaling messages from the buffered cell broadcast service pages and duplicate copies.

12. A wireless communication device comprising:

a transceiver;

a computer readable medium storing a program for operating the wireless communication device;

5 a processor coupled to the transceiver for receiving received information and coupled to computer readable medium for receiving the program, wherein the processor is programmed by the program to:

receive a plurality of cell broadcast service pages including one or more cell broadcast service pages that carry one or more signaling messages;

10 check message identifiers of the plurality of cell broadcast service pages to ascertain which of the plurality of cell broadcast service pages carry the one or more signaling messages; and

pass the one or more signaling messages to a program module.

15 13. The wireless communication device according to claim 12 wherein the processor is programmed to:

pass the one or more signaling messages to a program module specified by the message identifiers.

20 14. The wireless communication device according to claim 12 wherein the processor is programmed to:

receive one or more duplicate copies of one or more of the one or more cell broadcast service pages;

25 buffer at least a part of each of the one or more cell broadcast service pages and duplicate copies;

assemble the one or more signaling messages from the buffered, at least part, of the one or more cell broadcast service pages and duplicate copies.

15. A wireless communication system comprising:
an infrastructure that is configured to:
read a signaling message, that is of a particular type;
read a message identifier assigned to the particular type of signaling
5 message;
packetize the signaling message within one or more cell broadcast
service pages, each of which includes the message identifier; and
transmit the one or more cell broadcast service pages.
- 10 16. The wireless communication system according to claim 15 wherein the
infrastructure is configured to:
read a signaling message including a temporary mobile group identity
for a multicast or broadcast.
- 15 17. The wireless communication system according to claim 15 wherein the
infrastructure is configured to:
read a signaling message that controls discontinuous reception operation.
- 20 18. The wireless communication system according to claim 15 wherein the
infrastructure is configured to:
make one or more duplicate copies of the one or more cell broadcast service
pages; and
transmit the one or more duplicate copies.
- 25 19. The wireless communication system according to claim 15 wherein the
infrastructure is configured to:
prior to transmitting the one or more cell broadcast pages:
fragment each of the one more cell broadcast pages into a plurality of
radio network packets; and
30 multiplex the plurality of radio network packets with additional radio
network packets.

20. A wireless communication system comprising:
a means for reading a signaling message, that is of a particular type;
a means for reading a message identifier assigned to the particular type of
signaling message;

5 a means for packetizing the signaling message within one or more cell
broadcast service pages, each of which includes the message identifier; and
a means for transmitting the one or more cell broadcast service pages.

21. The wireless communication system according to claim 20 wherein the means
10 for reading the signaling message comprises:
a means for reading a signaling message including a temporary mobile
group identity for a multicast or broadcast service.

22. The wireless communication system according to claim 20 wherein the means
15 for reading the signaling message comprises:
a means for reading a signaling message that control discontinuous
reception operation.

23. The wireless communication system according to claim 20 further comprising:
20 a means for making one or more duplicate copies of the one or more cell
broadcast service pages; and
a means for transmitting the one or more duplicate copies.

24. The wireless communication system according to claim 20 further comprising:
25 a means for fragmenting each of the one more cell broadcast pages into
a plurality of radio network packets; and
a means for multiplexing the plurality of radio network packets with
additional radio network packets.

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25. The wireless communication system according to claim 20 further comprising:
a means for receiving at least some of the one or more cell broadcast pages;

a means for checking the message identifier in the one or more cell
broadcast pages; and

5 in case the signaling message is completely received and the message
identifier indicates that the one or more cell broadcast pages carry the
signaling message:

forwarding the signaling message to a program module identified by
the message identifier.

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26. The wireless communication system according to claim 25 further comprising:

a means for making one or more duplicate copies of the one or more
cell broadcast service pages;

15 a means for transmitting the one or more duplicate copies of the one or
more cell broadcast service pages;

a means for receiving at least some of the duplicate copies of the one
or more cell broadcast service pages; and

20 a means for, prior to forwarding the signaling message, buffering at
least parts of at least some of the one or more cell broadcast service pages, and
the one or more duplicate copies of the one or more cell broadcast service
pages; and

assembling the signaling message from the buffered cell broadcast
service pages.